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The primary objectives for year two were to: recruit and train 6 breast cancer survivors and 6 community women without breast cancer for a program to train women to become breast health educators and to implement breast health education programs (Breast Health Symposia) in community churches. The goal of the program is to encourage participation in mammography among women, ages 40 and older, who have not had a mammogram within 12 months.

A total of 8 breast cancer survivors and 9 women without the disease successfully completed a training program that was designed to enable them to effectively conduct breast health symposiums among churches located in South Central Los Angeles. The educators are similar in age, race and education. All trainees received a standardized training program that was led by the research team.

Twenty churches were randomly assigned to one of two intervention groups. Group A, the control group, received breast health education from community educators. Group B received breast health education from breast cancer survivors. To date, seven programs have been conducted. A total of 47 women attended the program and 23 were eligible to participate in a follow-up study designed to determine whether breast cancer survivors are 20 % more effective in encouraging women to obtain a mammogram within a six month period.

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FOREWORD

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A. INTRODUCTION

Mortality rates from breast cancer are higher in African-American women than other racial The excessive mortality is partially explained by a lower rate of or ethnic groups. participation in routine breast cancer screening. The purpose of this three-year research study is to increase utilization of mammography in minority women. The study is designed to test the hypothesis that breast cancer survivors will be 20% more effective than non-breast cancer survivors in encouraging mammography usage among women who have not had a mammogram within 12 months. In stage one, African-American breast cancer survivors and community women will be recruited and trained to serve as breast health educators. In stage two, breast education programs will be implemented among churches in South-Central Los Angeles, California. These programs are known as Breast Health Symposia. Twenty churches were randomly assigned to one of two intervention groups: Group A, control group, received breast health education from community educators. Group B received breast health education from breast cancer survivors. In stage three, the project will assess and compare screening rates among both groups.

Primary tasks to be accomplished within the second year of the project are to:

- Recruit breast cancer survivors and community women (extended from year one)
- Initiate training programs during months eleven through thirteen
- Select church coordinators during months six through sixteen
- Train church coordinators during months eleven through eighteen
- Develop schedule to conduct breast cancer programs in months twelve to twenty

Other activities to be conducted within the first twenty-four months of the project:

- Educators attend targeted churches prior to breast education project
- Educators to conduct community outreach programs (Breast Health Symposia)
- Collect follow-up data regarding mammography use

Descriptions of the progress of the project from August 1, 1998 to July 31, 1999 are summarized below.

B. BODY

B1. Recruit Cancer Survivors and Community Women

African-American women willing to assist in conducting church-based breast health programs participated in this study. Women with breast cancer and women without the disease were recruited from communities with large numbers of minorities in South-Central Los Angeles.

Breast cancer survivors were recruited from three African American breast cancer survivor groups. Dr. Robinson contacted each group and made presentations about the program

during regular meetings or to their key leaders (Presidents, Vice-presidents). In addition, announcements about the program were distributed to organizations that serve minority populations. The announcements provided information about the selection criteria and instructions on how to enroll in the program. The eligibility requirements are to be: (1) between the ages of 40 to 70, (2) at least 6 months post chemotherapy and/or radiation therapy, (3) physically and emotionally able to assume the task of educating, (4) a current resident of Los Angeles County and (5) of African-American descent.

A comparison group composed of women similar in race, age and education were selected to participate. They were identified by word of mouth and by distributing announcements describing the project to community-based agencies. Eligibility criteria are: (1) being between the ages of 40 and 70, (2) never having been diagnosed or treated for breast cancer, (3) no family history of breast cancer in biological mother, sister or daughter, (4) physically and emotionally able to assume the task of educating and (5) residency in Los Angeles County.

All interested participants were instructed to call the office of the principal investigator, Dr. Robinson, in order to enroll. Demographic information was obtained during the initial contact. Women who met the selection criteria were given an overview of the responsibilities, time commitments, reimbursement rate of \$15.00 per hour and transportation requirements. Each eligible and interested woman was asked to participate and an informed consent was obtained. An information packet regarding the training session (application form, directions and date of next training session) was sent to each candidate.

Ten (10) participants were recruited for each training program with the anticipation that attrition would reduce the number to 6 to 8. The participants were assigned to a specific category. Group one was designated for women without breast cancer and Group two was for women with a history of breast cancer.

A total of 30 women contacted the office regarding the training program. Three women did not meet the eligibility requirements and six women failed to attend the training program. A total of 21 women (n=12 breast cancer and n=9 women without breast cancer) attended the training program. Four educators who were breast cancer survivors were excluded from the study because their training was conducted with the input of an instructor who died from breast cancer. The remaining seventeen educators received the same training program (n=8 breast cancer survivors and n=9 non-breast cancer survivors).

B2. Initiate Training Session

Dr. Robinson and the curriculum specialist, Susan Henry, conducted the training programs at King/Drew Medical Center. All of the sessions followed the same format and covered the same topic using a training curriculum designed by Dr. Robinson and S. Henry. The training program was conducted in two 5-hour segments on different days. There was a thirty-minute orientation to the course and introduction of class members

during day one. All trainees were required to complete a sixty item pre-test. The program provided information that enables trainees to function effectively as breast health educators. Instructional methodology included lectures, group discussions, quizzes, take home materials and an annotated slide and videotape presentation with oral explanations. Day two offered trainees an opportunity to practice presentation skills, demonstrate their knowledge of breast health and to practice conducting the church based educational intervention, referred to as the Breast Health Symposium. To successfully complete the training program, each participant was required to attend all lectures, pass the posttest (85% correct) and conduct a mock evaluation of a symposium presentation. At the end of the training program, evaluations were done to assess the quality of the training program. Participants who passed the program received a certificate of completion. The certificate, hereafter, enables participants to serve as certified breast health educators.

Quantitative data regarding demographic information and pre and post tests were entered into a computer program using SPSS-PC and tabulated to summarize information about the participants' demographics and level of knowledge. Unique code numbers were assigned to all data collection materials. The composition of the identifier included use of initials for breast cancer survivors (BCS) and for the comparison group (CG). Chi-square and t-tests analyses of variance were used to test for differences between breast cancer survivors and non-breast cancer survivors. The final and more detailed analyses will occur during months 24-34 of the project

All seventeen participants, who attended the training program, successfully passed. Their mean age was 49, with a range of 40 to 60 years. All of the women had completed high school and some had obtained a Bachelor's degree. No significant differences in terms of age and education were found between the two groups. A higher percentage of women without breast cancer than those with breast cancer were married. Comparisons of baseline and post-training assessments revealed significant increases in knowledge about breast cancer prevention and control among both groups. Differences in knowledge between the two groups were greater at pretest compared to posttest. The mean pretest score was 54 for non-breast cancer survivors and 72 for breast cancer survivors. The mean post training score was 88 for non-cancer survivors and 92 for cancer survivors.

Susan Henry will evaluate all presentations by the breast health educators using the evaluative tool identical to the mock presentation evaluation. This feedback will identify strengths and weakness of evaluators and will be used to identity potential deficits of the training program that need to be addressed in the proposed refresher course. A two to three hour refresher course will be designed and implemented in the third year of the project. All educators will be required to attend.

Dr. Robinson has applied for copyright of the training program (See Appendix-B).

B3. Selection of Church Coordinator

The purpose of church coordinators is to assist in the organization of the symposium at the churches and to assist in recruiting women for the symposium. During the initial contacts with churches, Dr. Robinson asked the pastor or the designated contact person to identify at least one female who would be responsible for organizing the program. Dr. Robinson asked that they select a female whom others in the congregation usually turned to for advice or who would be most helpful in organizing an education program. To date, each church that agreed to participate in the study has identified a church coordinator and all of them accepted their appointed role. Dr. Robinson contacted each coordinator and congratulated her for having been selected.

B4. Church Coordinator Training Session

All church coordinators met with Dr. Robinson for 45-60 minutes. The purpose of the meeting was to acquaint them with the problem of breast cancer, describe their roles and responsibilities and inform them of the resources which they will need (tables for sign-in and consenting process) in order to conduct the outreach program. To reduce bias in the outcome variable, they were advised to avoid encouraging women to obtain a mammogram. The coordinator was also instructed to place announcements about the program in the church bulletin 3 to 4 weeks prior to the breast health symposium in order to provide information regarding the time and date of the program. In addition, they were asked to assist in arranging for Dr. Robinson and two educators to present a 5-minute overview of the study to the congregation. All church coordinators have selected a date for the conduct of a Breast health symposium.

B5 Develop schedule to conduct breast cancer program

Each church coordinator was responsible for scheduling a breast health symposium at their church. It was recommended that the symposium be scheduled after a Sunday Service or a normally scheduled event such as women's group meetings or usher board meetings. A total of twenty symposia were scheduled beginning in month 16 of the project. Based on the current schedule, a Breast Health Symposium will occur every three to four weeks from months 18 through 30 of the project. To date, seven Breast Health Symposia have been completed successfully.

B6. Other activities conducted within the first 24 months of the study

B6a. Educators attendance at church prior to education project

One week prior to the program, two educators, along with Dr. Robinson made a 5-minute presentation about the project to the congregation. Information about the duration and content of the program was provided and all women were invited to attend the Breast Health Symposium. A total of 7 presentations have been made. It is anticipated that the remaining presentations will occur as scheduled through month 30 of the project.

B6b. Conduct outreach programs

The educational intervention is implemented as a Breast Health Symposium. The educational intervention is conducted in community churches located in Los Angeles, California. Churches randomly assigned to group A received breast health presentations from community women. Churches assigned to group B received the same information, along with testimony from breast cancer survivors about their cancer experiences. All women who attended received a Breast Health Symposium Packet. Each participant was asked to complete a brief survey to assess their breast cancer screening behaviors and demographics. Attendees, aged 40 and older, who have not had a mammogram in twelve months and are without a personal history of breast cancer, will be asked to participate in a follow-up interview. Those who agreed to participate in the study were required to provide an informed consent and will be contacted in 6 months to determine if they obtained a mammogram.

A panel of four breast health educators jointly conducted each Breast Health Symposium. To standardize the delivery and content of all symposia, a Breast Health Symposium Slide Presentation Guide was developed by Dr. Robinson and S. Henry. Information about the anatomy and function of breasts, breast cancer statistics, breast cancer risk factors, the importance of detecting breast cancer early and routine participation in mammography are discussed. In addition, a demonstration of breast self-examinations and information on local and national breast cancer resources was provided. The information was presented in four sections. Each educator presented for 10 to 15 minutes. Presentations were followed by a question and answer period. At the conclusion of the symposium, evaluations were done to assess the delivery and quality of the program. Dr. Robinson was present at all symposia and assisted in the consenting process, conduct introductions and program evaluations. Data management and evaluation procedures are discussed in section B6d and B6e.

Dr. Robinson presented results from pilot testing the Breast Health Symposium to the National Medical Association. Subsequently, she submitted an abstract for presentation to the National Medical Association 1999 Annual Convention and Scientific Assembly on August 9, 1999 in Las Vegas, Nevada. The abstract was accepted for publication and presentation (See Appendix C).

B6c. Collect follow-up data regarding mammography use

Six-months after intervention, five attempts will be made to contact the subject. The first attempt will be a telephone call to the person's home or to a contact person if there is no home phone. A home visit will be made if necessary. The subject will be asked if she obtained a screening mammography and where. She will then be asked if she received the mammography results. Women with abnormal results will be asked if they need further assistance. Women with abnormal results will have access to social and medical support. The project will utilize breast cancer support group members to serve as navigators. They will be available to assist with a wide variety of psychosocial issues. In addition, Dr, Robinson will utilize other physicians from King/Drew Medical Center to facilitate

medical care. An interviewer who is unaware of the intervention groups will record follow-up data. It is anticipated that the follow-up assessments will begin during month 26 until month 35 of the project. Data collection instruments and plans to track women with abnormal results will be finalized during month 25 of the project (See Appendix D-Preliminary Six- month follow-up instruments).

B6d. Data Processing

Unique code numbers will be assigned to all data collection instruments, including the sixmonth follow-up survey. The composition of the identifier will include initials depending on the intervention group, date of symposium, initials of the church, and a code number that will be generated by the computer. The unique identifier will resemble the format: IC7299AMC325. Data will be monitored at several points throughout the study period.

Data collection instruments at each symposium are reviewed for validity and completeness. Dr. Robinson will resolve any omissions or questionable data at the time. The research assistant will contact participants via telephone in order to obtain missing information, if needed. Data will then be directed to Dr. Robinson who, again, will monitor the information obtained from data collection instruments for completeness and appropriateness. She will explore and resolve reports of data that are questionable or absent. Completed data collection instruments will be cleaned, edited and coded by the Epi-Stat Unit at King/Drew Hospital. An automated editing program to detect out-of-field observations will be designed by the Epi-Stat Unit. Data will be transferred to the Epi-Stat Unit for analysis. All copies and originals of data will be kept in a locked cabinet in the office of Dr. Robinson.

B6e. Interim analyses

Process evaluation will include documentation of the number of all women who attended the Breast Health Symposia and of all women who have not had a mammogram within 12 months. A total of fifty-five women were excluded from the baseline sample because they attended a symposium that was used for pilot testing or was conducted by a breast health educator who was later excluded from the study. To date, 47 women have attended the programs and 23 are eligible to participate in the study. The quality of the program was well received by the target population based on results obtained from the evaluation forms. More detailed analyses will occur during months 24-34 of the project.

The outcome variable represents the number of women who obtain a mammogram within six months following attendance at the symposium. This will occur during months 24 through 34 of the project. Analyses of the outcome variables will begin during months 26 of the project. This will occur with input from the Epi-Stat Unit at King Drew University.

Descriptive statistics will be used to describe inadequately screened women in terms of demographics and screening behaviors and to compare intervention groups in terms of demographics. The statistics will be means for continuous data and proportions for categorical variables. The T-test and Chi-Square test will be used to assess significance of differences. Stratification and multivariate analysis will be used in subsequent analyses to

adjust for any significant baseline differences among the intervention group during months 24-34 of the project.

C. KEY ACCOMPLISHMENTS

- → Pilot testing of the Breast Health Education Curriculum and Training Manual
- ♦ Pilot testing of a Computerized Breast Health Slide Presentation
- ♦ Continuing Recruitment and Training of Breast Health Educators
- ♦ On-going Implementation of Educational Intervention (Breast Health Symposia)

D. REPORTABLE OUTCOMES

- 1. Applied for copyright for training program and breast health slide presentation
- 2. Presentation of preliminary results at a national conference
- 3. Abstract accepted for publication

E. CONCLUSIONS

Progress has been made toward accomplishing the goals and objectives of the project. Training community women and implementing breast health programs in several community churches has resulted in increased awareness about advances in breast cancer prevention and control. Because of the need to contact large numbers of women, the research study has targeted churches with large numbers of active members. Not enough time is available to establish a sustainable infrastructure for health promotion among churches with small congregations. Future church based interventions may be required to target smaller churches so as to capture older and more underserved populations.

APPENDICES

APPENDIX- A

PARTICIPANT STATISTICS

Figure One. Descriptions (Means) of Age, Pretest and

Posttest among both groups of Breast Health

Educators

GROUP	AGE	PRETEST	POSTTEST
NON BREAST CANCER	49.1	53.7	88.3
SURVIVORS N=9	1		
	6.5		
STD. Deviation		10.5	2.8
	10.1		
BREAST CANCER	49.4	72.8	92.9
SURVIVORS N=8			
CED Danistian	(0)	11.2	1.2
STD. Deviation	6.8	11.2	4.2
TOTAL	49.2	62.6	90.5
TOTAL	77.2	02.0	70.5
STD. Deviation	6.5	14.4	4.1

Figure Two. T-Test Comparison of Pretest and Posttest among all Educators

	MEAN	Number	Standard Deviation	Significance
Pretest	62.6	17	14.4	
Posttest	90.5	17	4.1	.000

APPENDIX-B

FEE CHANGES

Fees are effective through June 30, 2002. After that date, check the Copyright Office Website at www.loc.gov/copyright or call (202) 707-3000 for current fee information.

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A Computerized Outreach Program for Educating Women about Breast Cancer Prevention and Screening

Susan B. Robinson, MD, MPH S. Henry RN, MSN

Health programs delivered by community volunteers (health educators) are an effective and commonly used channel for disseminating cancer information to minority populations. Unfortunately, educating individuals with accurate and up- to-date information about cancer prevention and control can be a difficult task. Moreover, few outreach tools are available to assist breast health educators servicing African-American women. The purpose of this project was to determine if a computer-generated slide presentation is an effective method for communicating information about breast cancer.

A pretest-posttest study design was used to pilot test the intervention among African-American women residing in Los Angeles, California. Sixty women between the ages of 40 and 70 years were recruited from two churches. Participants attended a one-hour breast health symposium. The presentations were led by an African-American female and provided information about the anatomy of the breast, the importance of screening, breast cancer statistics and self-examination techniques. To assess the impact of the intervention on breast cancer knowledge, a 20-item questionnaire was administered prior to and after each symposium. To rate the programs' appropriateness and content, qualitative and quantitative data was obtained.

Chi-square analysis of pre and posttests indicated significant improvements in short-term knowledge of breast cancer and screening guidelines. Results from the survey suggested that the intervention is well accepted by African-Americans. In conclusion, computergenerated slide presentations may be a useful adjunct to outreach interventions targeting minority populations.

This activity was supported by grant #DAMD17-97-7189 from the U.S. Army Medical Research and Material Command.

APPENDIX- D

CHARLES R. DREW UNIVERSITY OF SCIENCE & MEDICINE BREAST HEALTH SYMPOSIUM

Sixth-Month Follow Up Survey Telephone Documentation

Participant D	ata Sheet				•
Name:					
Street Address	s:				· · · · · · · · · · · · · · · · · · ·
City, State:			Zip (Code	
County: _	· .				
County: Location of Sy	mposium:_			•	
Date of Symn	osium. /	/			
Interviewer:		Da	te of Call: _	//_	· · · · · ·
Telephone L					
Date					
Day					
Hour					
Left					
Message					
Interviewer					
Initials					
Unable to con					
	Disconnect				
		at this numb			
		nember prog	gram		
	Refused	(D)	• • • •		
	Other Reas	on (Please sp	pecity)		

CHARLES R. DREW UNIVERSITY OF SCIENCE & MEDICINE BREAST HEALTH SYMPOSIUM

SIX MONTH FOLLOW-UP INTERVIEW

	rections to interviewer: Record responses by placing a check (\checkmark) in the responding boxes.
belt atte per sho res rep rep cho	roduction: Hello my name is and I am calling or half of the Breast Health Education Project, a program that you ended on at You gave us smission to call you. Do you remember the program? I am doing a port survey to see how you have been since the program. All of your ponses will be kept confidential. Only group responses will be corted. No information about individuals or their responses will be corted. I will read a series of questions to you. Please listen to all the pices before answering. There will be only one answer for each estion.
1.	Have you examined your own breasts since you attended the Breast Health Project and, if so, how often?
	□ ¹Yes, every month □ ²Yes, but not every month □ ³No
2.	Have you had a breast examination by a doctor or nurse since you attended the Breast Health Project Program?
	□ ¹Yes □ ²No

	ID Number:
3.	Have you had a mammogram or x-ray of the breast since you attended the Breast Health Symposium?
	□ ¹Yes □ ²No (Go to question 5) If yes, can you tell me when you had the mammogram?//
4.	Were your mammogram results abnormal?
	□ ¹Yes □ ²No (Go to question 7)
	If yes, was breast cancer diagnosed?
	□ ¹Yes, Please explain □ ²No (Go to question 7)
5.	Do you currently have an appointment for a mammogram?
	□ ¹Yes □ ²No If yes, when is your appointment? Month19 (Go to question 7)
6.	Do you intend to have a mammogram this year?
	□ ¹Yes □ ²No, if no why?
7.	Do you want more information about breast health or cancer?

Thank you for participating in the project. If you have any questions or concerns, please call us at 323-357-3498.

□ ¹Yes
 □ ²No